

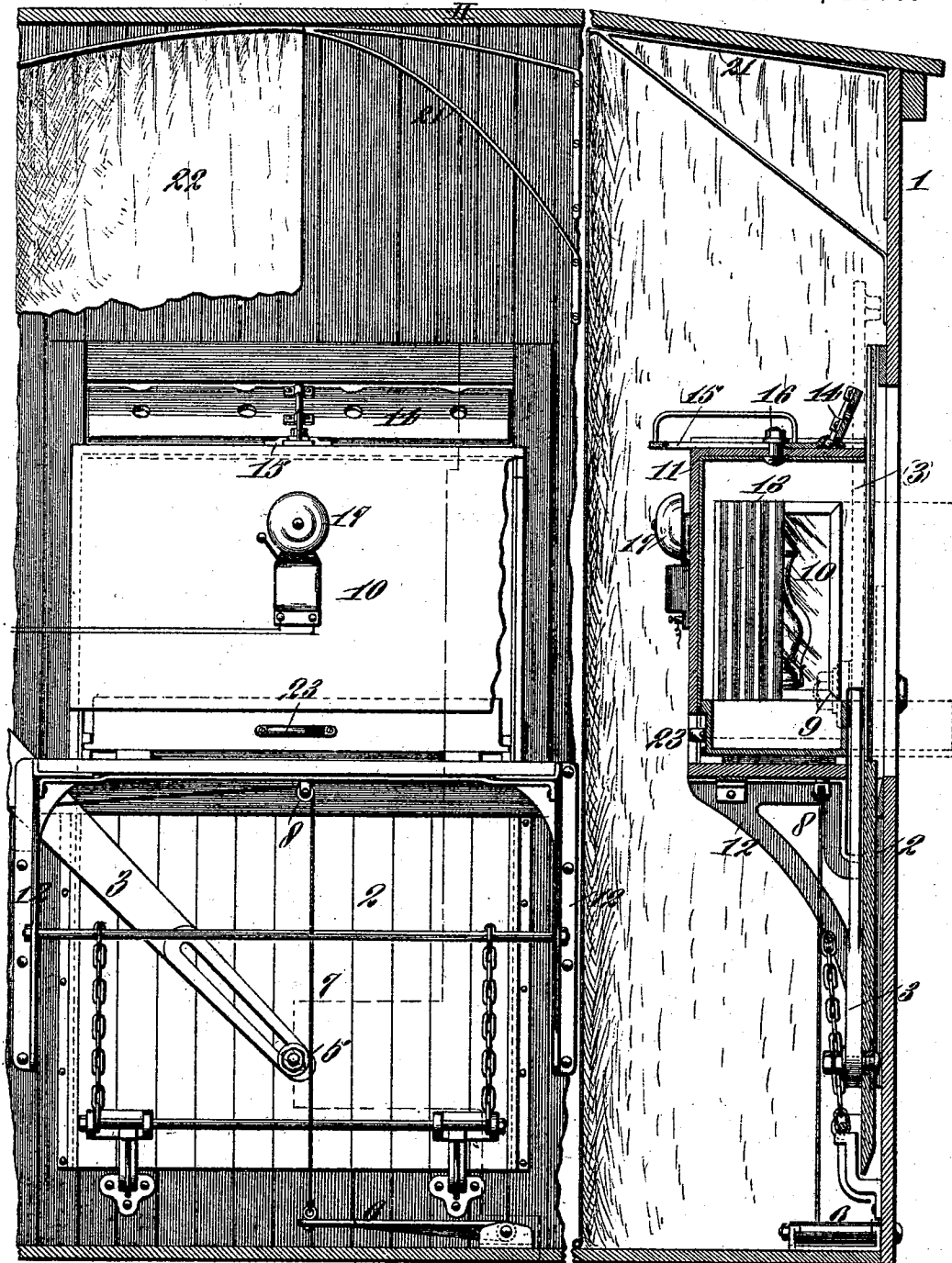
(No Model.)

2 Sheets—Sheet 1.

J. C. BRATTON & A. B. GRAHAM.
BURGLAR ALARM ATTACHMENT FOR RAILWAY CARS.

No. 552,465.

Patented Dec. 31, 1895.



WITNESSES:

Stanley Stoner
Charles Pickles,

Fig. I

Fig. II

INVENTORS,

Jacob C. Bratton
Arthur B. Graham

BY

Knight Bros.
ATTORNEYS.

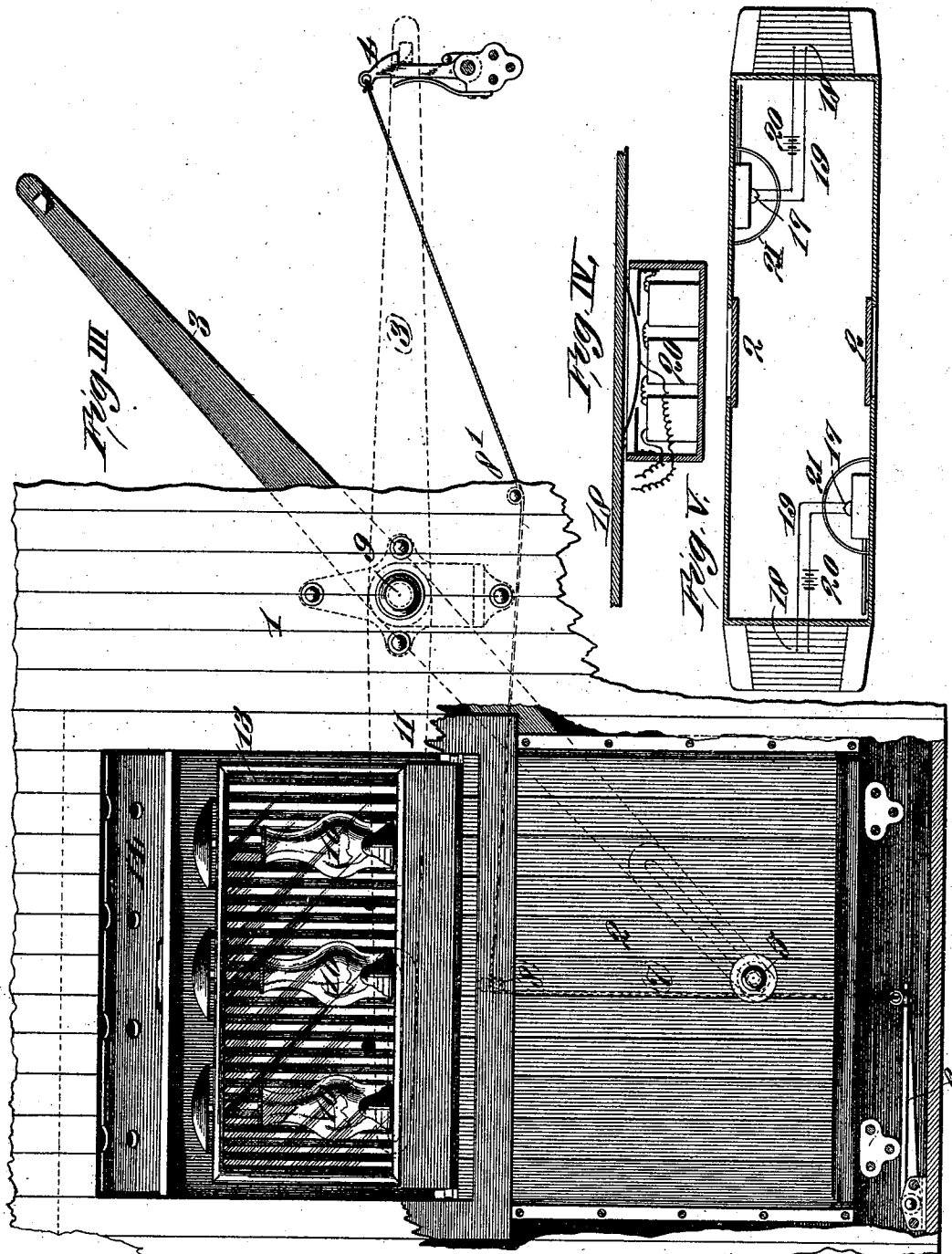
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UNITED STATES PATENT OFFICE.

JACOB C. BRATTON AND ARTHUR B. GRAHAM, OF ST. LOUIS, MISSOURI.

BURGLAR-ALARM ATTACHMENT FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 552,465, dated December 31, 1895.

Application filed August 19, 1895. Serial No. 559,756. (No model.)

To all whom it may concern:

Be it known that we, JACOB C. BRATTON and ARTHUR B. GRAHAM, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Burglar-Alarm Attachments for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of our invention is to provide a device by means of which a burglar alarm may be given, and which is provided with mechanism for illuminating the area adjacent to the car without exposing to danger the messenger or other persons within the car, and which will also afford a means of defending the same.

Our invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, Figure I illustrates in elevation the interior of the car, showing the back of our device. Fig. II illustrates a vertical cross-section of the same along the line II II, Fig. I. Fig. III illustrates an outside view in elevation of the illuminating part of our device, showing the lever attachment by means of which the screen to the illuminators is operated. Fig. IV illustrates a cross-section of a step to the car, showing the means by which the electrical circuit is closed to sound a bell-alarm. Fig. V is a plan view of the car-body, showing the electrical connection between the said step and the bell inside of the car.

The same numbers refer to the same or similar parts throughout the several figures.

1 is the side of the car.

2 is a screen adapted to inclose an opening in the side of the car. 3 is a lever attached to the said screen 2 and which is held in its normal position by means of a spring-controlled hook 4, said hook being adapted to engage a lug on the outer end of the lever 3. The said lever at its other end is attached to the screen 2 by means of a pin 5, said pin working in a slot in the end of said lever, and by this means holds the screen 2 in its proper or normal position.

6 is a foot-piece attached to the floor of the car near the illuminating portion of our de-

vice, and which is connected with the spring-hook 4 by means of a cord or chain 7, said cord or chain working over the pulley-guides 8 8', said guides being attached to the inside of the car.

9 is a pin on which the lever 3 is hung to the side of the car.

10 are lamps placed within a movable box 60 or frame 11.

12 are brackets attached to the side of the car, upon which the frame 11 is supported.

13 is a reflector of any suitable construction placed behind the lamps 10 and attached to the frame 11.

14 is an armor-plate of steel attached to the upper portion of the frame 11, provided with openings, as shown, and which is attached to the said frame 11 by means of a pin 16 working in a slot in a sliding bar 15.

17 is an electric bell, preferably placed upon the back of the frame 11.

18 is one of the steps leading to the car. 19 are wires connected with a battery, leading from said step 18 to the said electric bell 17. 20 is the battery thereto.

21 is a frame attached to the interior of the car, adapted to support a screen or curtain 22, which conceals the mechanism of the device.

23 is an ordinary pull-handle, by means of which the frame 11 may be pushed forward or withdrawn upon its supports 12.

The operation of our device is as follows: The presence of train-robbers may be detected by means of the electric bell being thrown into operation by a person stepping upon the platform or step 18, the said step 18 being adapted to depress and carry the contact-plate carried thereon into electrical connection with the wiring, as shown in Fig. IV. This causes the bell to ring, and as ordinarily no one is allowed upon the platform of an express-car this gives notice of the presence of a robber. The alarm being given, the express-messenger or other person presses upon the foot-piece 6. This by means of the connection accomplished by the cord 7 pulls the hook 4 from off the lug on the lever-arm 3, the normal position of which is shown in broken lines in Fig. III. The force of gravity thereupon drops the screen 2, as shown in Fig. III, opening that portion of the side of

the car into which the frame 11 fits. This frame 11 is thereupon pushed forward by means of the handle 23 into the position shown in broken lines in Fig. II. The lamps 10 are thereupon placed outside of the plane of the side of the car, and the area adjacent to the car is therefore illuminated in all directions, both up and down the track, as well as away therefrom. The armor-plate 14, carried on top of the frame 11, is then pushed forward, a sufficient opening in the side of the car being provided therefor. This armor-plate is furnished with perforations, through which the messenger within the car may shoot, and at the same time affords ample protection to such person within the car. It is pivoted in such a manner as to allow it to be turned either to the right or to the left, as well as to be pushed forward. To again put the apparatus in its normal position, the armor-plate 14 is drawn back and the frame 11 is drawn into the car upon its supports 12 to the position shown in Fig. II. The screen 2, forming a portion of the side of the car, is raised by means of lowering the outer end of the lever-arm 3, said lever-arm being then engaged upon the hook 4.

By means of this device the entire area surrounding the car may be easily and quickly illuminated without exposing to any danger whatever the occupants of the car thereby, showing to the said occupants any robbers and exposing the robbers to the fire of messengers, while the said messengers remain completely concealed.

While we have shown and described the illuminating portion of our device as consisting of lamps, we do not limit ourselves to this construction, as any suitable means, such as electric lights, could be used.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a railway car, of a frame carrying illuminators, means whereby said frame may be projected beyond the plane of the side of the car, a sliding door adapted

to conceal the said illuminators, and a means for automatically operating said door, consisting of a lever pivoted to the wall of the car and provided at one end with a slot, a pin or bolt on said door arranged to travel in said slot, a catch pivoted to the wall of the car, said catch being adapted to engage and hold said pivoted lever, a cord connected to said catch, and a treadle having a connection with said cord for the purpose of releasing said catch, substantially as set forth.

2. The combination with a railway car, of a frame carrying illuminators, a means whereby said frame may be projected beyond the plane of the car side, a sliding door in the side of said car adapted to conceal the said illuminators, and a means whereby said door may be automatically dropped, said means consisting of a lever pivoted to the wall of the car and connected at one end to said door, a catch arranged to engage the opposite end of said lever, and a cord by which said catch is released from engagement with said lever, substantially as set forth.

3. The combination with a railway car of a frame carrying illuminators, means whereby the said frame may be projected beyond the plane of the car side, an armor plate 14 carried on top of said frame and adapted to be turned from side to side, substantially as set forth.

4. The combination with a railway car, of a frame provided with illuminators, said frame being adapted to be projected beyond the plane of the car side, an armor plate 14 carried upon the top of said frame, a sliding door placed in the side of the car and adapted to conceal the said illuminators when not in use, means whereby the said door may be automatically dropped, and an electric alarm bell, all substantially as described.

JACOB C. BRATTON.
ARTHUR B. GRAHAM.

In presence of—
E. S. KNIGHT,
N. FINLEY.